Remarks

At present applicants' claims 1-9 stand rejected under 35 U.S.C. § 112, second paragraph. Additionally, claim 9 stands rejected under 35 U.S.C. § 101. Claims 1, 2, 4, 5, 7, 8 and 9 stand rejected under 35 U.S.C. § 102(b) based upon the patent to Champagne et al. (US Patent Number 4,750,165 issued June 7, 1988). Additionally, claims 3 and 6 stand rejected under 35 U.S.C. § 103 based upon the aforementioned patent to Champagne et al. in further view of the patent to Mendel (US Patent Number 6,192,443 issued February 20, 2001). In light of the amendments made to applicants' claims and the comments presented below all of these rejections are respectfully traversed.

Attention is first directed to the rejection of applicants' claims 1-9 under the second paragraph of 35 U.S.C. § 112. In this respect, the Examiner indicates that it is not clear whether or not the reference to a sender is the same as the reference to "sending a plurality of messages from a process." To applicants' mind these two concepts are indeed one and the same. It was and is still applicants' intention to present them as such. However, to avoid any possibility of confusion without in any way narrowing the intended scope of applicants' claims, the present amendment introduces the word 'sending' before the word 'process' in the first line of the first recited claim step. This should avoid any potential ambiguity since all of the recited steps in applicants' claim 1 now refer to a sending process.

The Examiner also wonders what the equal plurality of other nodes refers to. In a nutshell, this is what is happening. There are a bunch of nodes in a distributed data processing system. One of the nodes sends a bunch of messages to other nodes in the system, not necessarily to all the other nodes in the system, but certainly to a plurality of them. The intent of the language originally present, and as amended, is to reflect the notion that the plurality of messages go to different nodes with each one of the messages being directed to a different node. It is applicants' attorney's position that the original phraseology amply reflects this state of

affairs. However, in an effort to avoid any confusion without in any way whatsoever narrowing or changing the scope of applicants' claims, the applicants' have amended claim 1 in a manner which should more accurately reflect exactly what is equal to what.

With these two changes to applicants' claim 1 (and to claim 9 discussed below), it is seen that any remote chance for vagueness or ambiguity has been removed. It is therefore respectfully requested that the rejection applicants' claims 1-9 under 35 U.S.C. § 112 be withdrawn.

Attention is next directed to the rejection of applicants' claim 9 under 35 U.S.C. § 101. Applicants' claim 9 is directed to what is commonly referred to as a program product, that is to a computer readable medium containing program information with the program enabling steps for a data processing system to carry out certain specified operations. These operations are typically the ones found in the body of a program product claim such as claim 9. In this regard, the Examiner has indicated language that would be found to be acceptable as a verbiage required for a program product claim. Since applicants' perceive of no substantive difference between what was originally presented and what the Examiner presents, applicants' have acquiesced in the Examiner's suggestion and accordingly have amended claim 9 to reflect the Examiner's comments specified in paragraph 5 on page 2 of the above mentioned Office Action.

Accordingly, for this reason it is therefore respectfully requested that the rejection of applicants' claim 9 under 35 U.S.C. § 101 now be withdrawn.

Attention is now directed to the art based rejections of applicants' claims. In particular, consideration is given to the rejection of applicants' claims 1, 2, 4, 5, 7, 8 and 9 under 35 U.S.C. § 102 based upon the patent to Champagne et al. In this regard, it is noted that a rejection under 35 U.S.C. § 102 is a narrow ground of rejection. It requires each and every recited claim element to be found within the four corners of a single cited document. Any exceptions to this hard and fast rule are not relevant to the facts herein. In this respect, it is seen that the patent to Champagne et al. is very much irrelevant.

First of all, it is noted that in applicants' claimed method a plurality of messages are sent out from a sending process running on one node. These messages are sent to a plurality of other nodes. In the patent to Champagne et al. there are two nodes. In a two node situation, the problem presented by the present applicants doesn't even arise. If a node sends out a message to only one other node it can easily either wait for the response or keep pinging the node trying to encourage it to respond. The problem comes in when a plurality of messages are sent out to a plurality of nodes. One must then wait until all of the responses are received before one can continue. Accordingly, sending processes operating under such conditions typically sit in an active state waiting for all of the responses to arrive, even though one of these responses may never arrive. Accordingly, in applicants' claimed invention once a plurality of messages are sent the very next step is to set the status of the sending process to an idle state. This ensures that the process does not in the meantime consume useful and valuable CPU resources. Furthermore, in applicants' claimed process the transition from an idle state to an active state occurs only upon receipt of all the responses or upon received notification that at least one of the responses isn't going to arrive. This is not in any way similar to the way in which the systems in the patent to Champagne et al. operate.

In particular as pointed out above, Champagne et al. discuss a situation in which there are only two nodes. The process becomes significantly more complicated when there are a plurality of nodes to which messages are directed. In applicants' claimed scenario it is not simply a case of waiting for one response, but for a number of responses. And the question then becomes, what do you do while you are waiting? And the further question becomes, what do you do when it becomes known that one of the responses isn't going to be forthcoming? This is not a factual scenario which is in any way contemplated by the one node to one node system described by Champagne et al.

Apart from this major deficiency, there are other very significant differences. Setting aside for the moment the issue that Champagne et al. does not deal with more than two nodes

(solely for the sake of argument) the Examiner's attention is directed to their column 9, lines 48-52 wherein it states:

"At line 25, node B indicates that is has correctly received (SESC, PACK) the message from node A and confirms it at line 29. Starting at line 28, node A goes idle and node B continues to send it's message."

It is the clear and unequivocal teaching of Champagne et al. that the sending node (node A) goes idle only after confirmation is received from node B. In stark and utter contrast in applicants' invention, it is seen that, as soon as the plurality of messages are sent, the status of the sending node (more particularly the sending process) is set to idle. And this points out yet a whole other set of differences between the teachings of Champagne et al. and that which are found in applicants' specification and claims. In particular, Champagne et al. refer to an entire node going idle. This seems to be a bit of a waste of time and effort when only a single process on the node is involved in sending the message. It is clearly not useful or desirable for an entire node to go into an idle state. In contrast, it is seen that applicants' claims assert that only the sending process has a state which is switched from active to idle and back again.

Accordingly, for all of these reasons it is seen that there are significant differences between that which is recited in applicants' claims and that which is clearly and unequivocally taught by the patent to Champagne et al. Thus for all of the reasons indicated above it is seen that the rejection of applicants' claim 1-9 based up on the patent to Champagne et al. cannot withstand scrutiny. It is therefore respectfully requested that this rejection be withdrawn.

Finally, attention is directed to the rejection of applicants' claims 3 and 6 under 35 U.S.C. § 103 based upon the patent to Champagne et al. in view of the patent to Mendel. In this regard, all of the deficiencies in the patent to Champagne et al. that have been indicated above are also seen to be present in the combination of teachings from Champagne et al. and Mendel. In particular, the combination still recites that an entire node goes idle. This is not something that

would be suggested to anyone with the meagerest of skills in the computer arts. One does not turn off an entire node merely because one of its processes is waiting for a response.

Furthermore, the combination of the teachings with Mendel cannot also correct the significant deficit taught by Champagne et al. that idleness is a state that is entered only after message receipt confirmation is received. Clearly applicants' claim step 2 begins right after applicants' claim step 1 which involves the sending of a plurality of messages.

Thus, in applicants' claimed invention messages are sent, the status of the sending process is set to idle, and the status of the sending process is returned to active only upon a receipt of the responses to all of the message or to a notification that at least one of the responses is not forthcoming. In contrast, it is seen that in accordance with teachings of Champagne et al., an idle state is not entered immediately. It is only entered after a message has been received by a node and that node has provided a confirmation of receipt. These are clearly distinct processes. Furthermore, not only are these processes distinct but the limitations imposed by the process limitations set forth in Champagne et al. would direct those of ordinary skill in the art to processes which run quite contrary to that which is recited in applicants' claims. Accordingly, for these reasons as well, it is seen that the rejection of applicants' claims 3 and 6 under 35 U.S.C. § 103 based upon the patent to Champagne et al. in view of the patent to Mendel is not well founded. It is therefore also requested that it be withdrawn.

It is noted that the present response does not require the payment of any additional fees in terms of changes made to applicants' claims. However, because of other pressing matters it is necessary to request a one-month extension of time, submitted concurrently herewith.

Accordingly, a deposit account form with authorization to charge applicants' Assignee account for this extension of time is included herewith. It is also noted that the amendments being made to applicants' claims made herein are being made as of right.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any

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claim, unless applicants have argued herein that such amendment was made to distinguish over a particular cited document or combination of documents.

Accordingly, it is now seen that all of the applicants' claims are in condition for allowance. Therefore, early notification of the allowability of applicants' claims is earnestly solicited. Furthermore, if there are any other matters which the Examiner feels could be expeditiously considered and which would forward the prosecution of the instant application, applicants' attorney wishes to indicate his willingness to engage in any telephonic communication in furtherance of this objective. Accordingly, applicants' attorney may be reached for this purpose at the numbers provided below.

Respectfully Submitted,

Date

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